cavalry™

Instruction Manual

CAUH Passio Series

USB External Storage

Data Security

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FEATURES

Thank you for purchasing the Cavalry CAUH encrypt-able external hard drive! The CAUH is designed for optimal security. It utilizes the same state-of-the-art AES [Advanced Encryption Standard] encryption algorithm used by the National Security Agency! It does this all via the on-disk firmware; which means minimal affect on drive performance! The USB 2.0 interface delivers wide-spread compatibility with most modern Windows operating systems. Once encrypted, the CAUH provides easy and secure access from most Windows machines, all in a sleek and portable package.

- AES Total-Disk Encryption
- Up to 32 Character Alpha-Numeric Password Sizes
- Up to 60MB/S Maximum Transfer Speed
- USB 2.0 for Broad Multi-OS Compatibility
- Pre-Formatted to NTFS
- Up to 2 Tb of Fully-Encrypted Data
  Capacity varies by model

SPECIFICATIONS

- **Interfaces:** Internal: SATA II
  External: 1 x USB 2.0
- **Power Supply:** In: 100-240v~50/60 Hz 1.0A
  Out: 12V/2A United States
- **Dimensions:** Â 7.20” x 5.11” x 1.37”
  (183mm x 130mm x 35mm)
  6.25” x 5” x 3.25”
- **Weight:** 2.87 lbs (1.3kg)

PACKAGE CONTENTS

- **CAUH Unit**
- **USB 2.0 Cable**
- **Power Adapter**
- **Desktop Stand**
- **Quick Start Guide**
- **Resource CD**

APPLICATIONS

With the proliferation of identity-theft and advanced hacking techniques, enterprise users must be more careful than ever with their classified data. Even the most expensive firewalls can only provide protection when you are logged into the workgroup. But if you’re on the move or merely away from your desk, your company’s data will be at great risk. The only way to protect your valuable information from local attacks is encryption.

The CAUH provides this using the ultimate in encryption: the AES advanced encryption algorithm. AES is the only commercial encryption algorithm approved for use by the National Security Agency for secret and top-secret file storage! Without the password, there is simply no way to retrieve data from an AES-encrypted drive!

SYSTEM REQUIREMENTS

- **OS Compatibility:**
  Windows XP / Vista / 7 + (32-bit & 64-bit)
  Operating System (Re-format for un-encrypted use with Mac OS 10.4.8 +)
- **Hardware Requirements:**
  USB 2.0 Port
- **Operating Environment:**

Temperature	Operating: 41° - 131° F Non-Operating: 40° - 149° F
Relative Humidity	Operating: 8% - 90% RH non-condensing Non-Operating:5% - 95% RH non-condensing

INSTALLATION STEPS

There are two ways to configure your CAUH:

- Un-encrypted
- Encrypted

UN-ENCRYPTED:
Un-encrypted use is the sole choice for Mac users, or casual users who do not plan on storing sensitive data. To install the drive in un-encrypted mode, simply connect the drive according to the included Quick Start Guide. Mac users will need to format the drive in Disk Utility. Windows users should see the drive in (My) Computer and Disk Management, and Initialize or Partition the drive if need be.

!Encryption is only available for users of Windows XP/Vista/7!

ENCRYPTED:
Encrypting the CAUH requires a more advanced setup procedure than a standard external drive. As a result, we ask that you please read the installation guide completely before you attempt to encrypt the CAUH. The Encryption process will be divided into 3 sections:

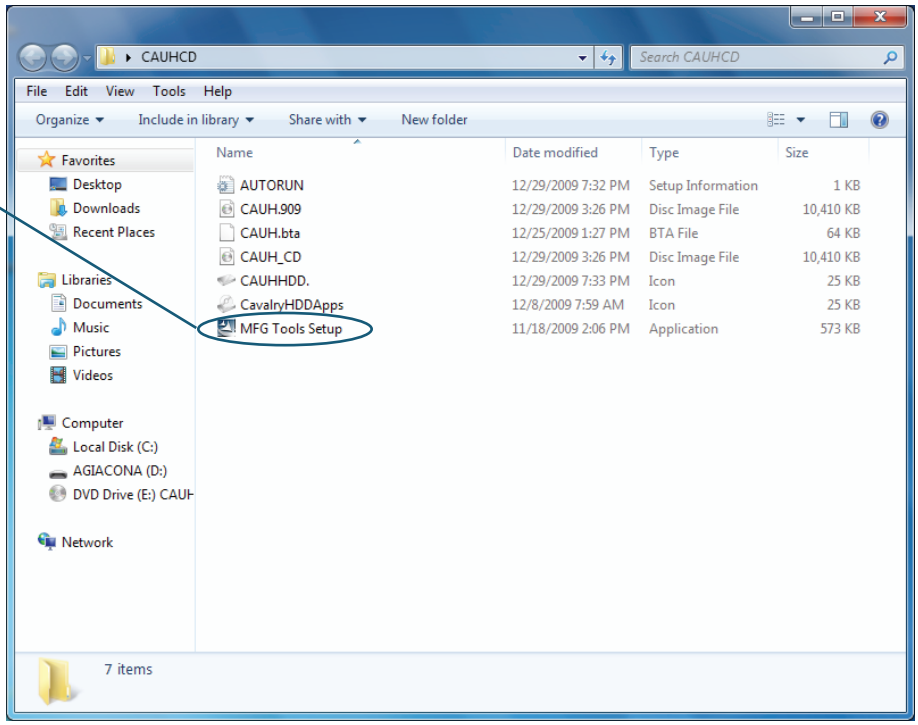
A) Software and Hardware Preparation
B) Software Installation and Encryption
C) Password Creation

A SOFTWARE AND HARDWARE PREPARATION

1) Make sure that you are logged into Windows as an Administrator. Then, insert the resource CD into your Windows computer.

2) Copy the entire “CAUHCD” folder from the CD onto your desktop.

3) Open the folder, and carefully take notice of the location of these 5 files:
   a. ”MFG Tools Setup”
   b. “CAUH.bta”
   c. “CAUH.909”
   d. “CAUHHD.”
   e. “AUTORUN”

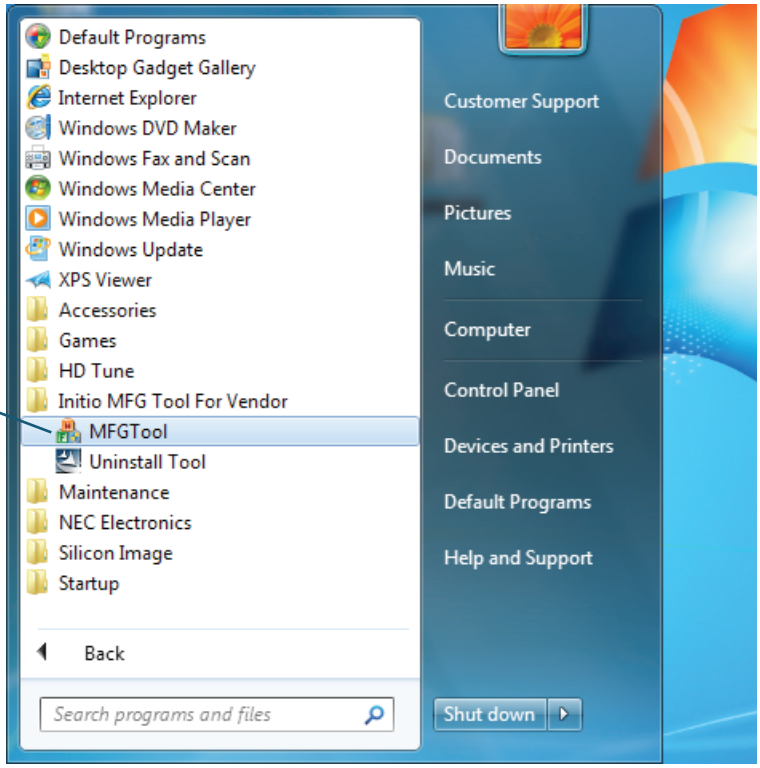


4) Now plug your Cavalry power supply into the nearest outlet, and plug the other end into your CAUH. Turn the CAUH on.

5) Plug the USB cable into both the CAUH and your Windows computer.

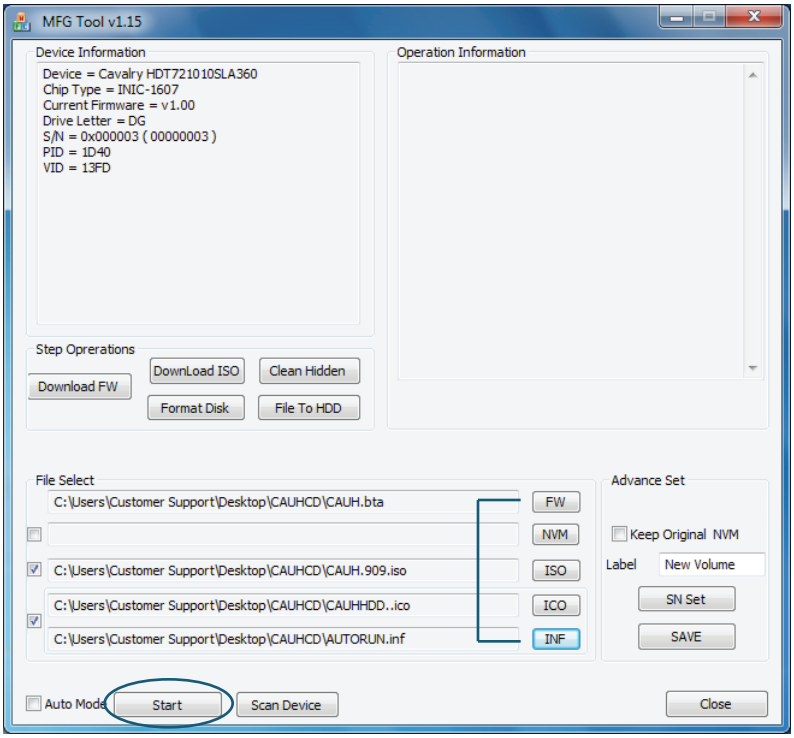
B SOFTWARE INSTALLATION AND ENCRYPTION

6) Now launch the MFG Tools Setup program directly from the CAUHCD file you just copied to your desktop.
   a. Allow it to select all of the install options automatically.
   b. After the install finishes, open the "MFGTool" program under Start> All Programs. We will use the newly-installed MFGTool program to encrypt your CAUH.



! DO NOT ATTEMPT TO BROWSE-SELECT THE FILES ON THE CD!

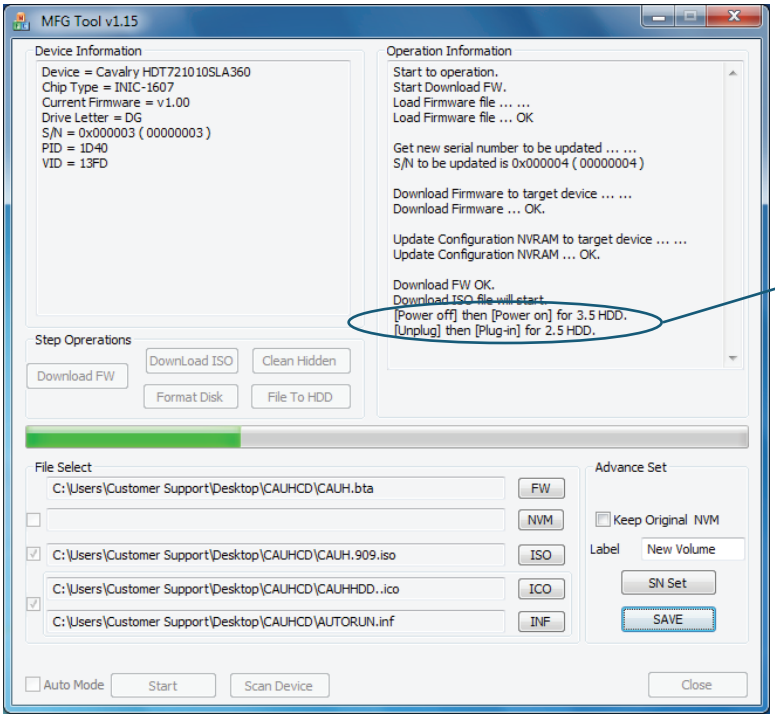
7) Once MFGTool is open, you will need to browse for (and select) the previous four files within the CAUHCD folder, which you just placed on your desktop.
   a. FW: Click this button, and browse-select the CAUH.bta file.
   b. ISO: Click this button, and browse-select the CAUH.909.iso file.
   c. ICO: Click this button, and browse-select the CAUHHDD.ico file.
   d. INF: Click this button, and browse-select the AUTORUN.inf file.



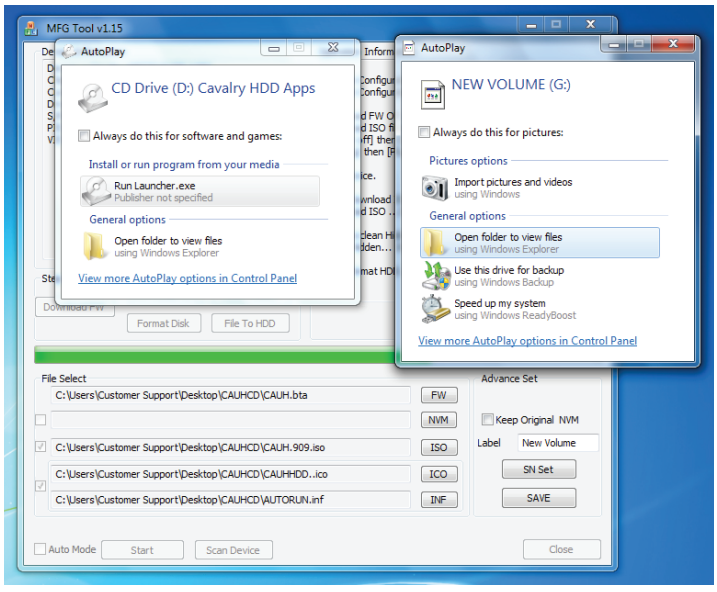
B SOFTWARE INSTALLATION AND ENCRYPTION (Cont'd)

8) Before you press start, be poised to turn your CAUH's power switch off and on quickly. But, wait until the MFGTool program instructs you to do so! The very bottom of the "Operation Information" window (on the right-side of the MFGTool interface) will give you specific instructions, as well as a log of all of the operations it is currently performing.

9) Press Start at the bottom of the MFGTool window. The program will scan for your device first. Then, it will begin installing the special encryption firmware. Keep an eye on the bottom of the Operation Information window.



10) Within a few seconds, the Operation Information window will say this, "Please [Power Off] then [Power On] for 3.5" HDD." Quickly turn the CAUH power switch off and back on.



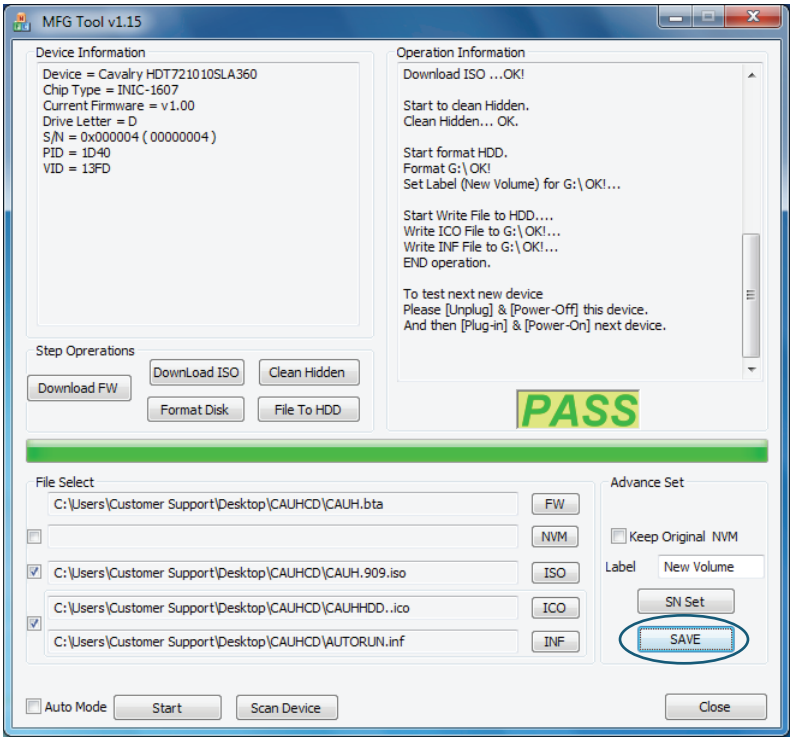
11) "Autoplay" may appear and attempt to access your drive. Ignore and close these windows.

B SOFTWARE INSTALLATION AND ENCRYPTION (Cont'd)

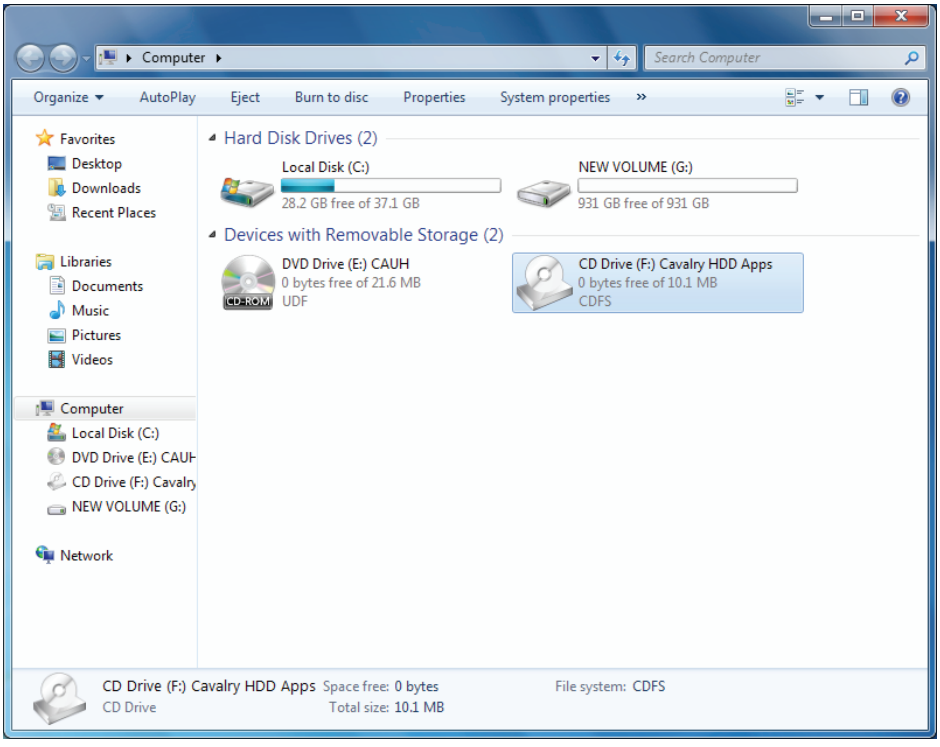
12) Once the MFGTool finishes encrypting your CAUH drive, it will display the message "Pass." Now press "Save."

13) Unplug and re-plug the cable from your CAUH drive.

14) Once your drive has been recognized, close MFGTool.



C PASSWORD CREATION

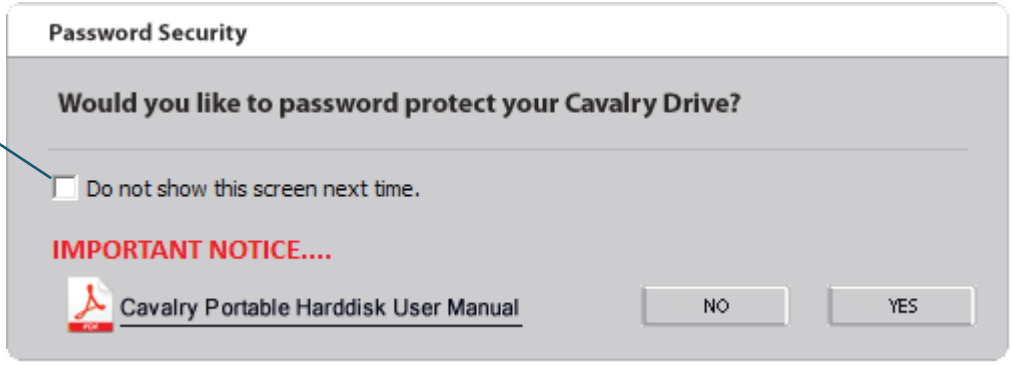


15) Navigate to (My) Computer and double click on "Cavalry HDD Apps". This is the location of the encryption and password algorithm. Whenever you plug in your CAUH, you will see this drive first. Once you have logged into Cavalry HDD Apps, you will see another blank drive in which you can store your encrypted data. See the FAQ for instructions on changing your password.

C PASSWORD CREATION (Cont'd)

16) You will be asked whether you would like to set a password for your CAUH drive. Select "Yes."
17) Enter a password between 5 and 32 alpha-numeric characters long. Remember, the password is case sensitive!

Warning! Checking this box will permanently disable password-protection on your drive!

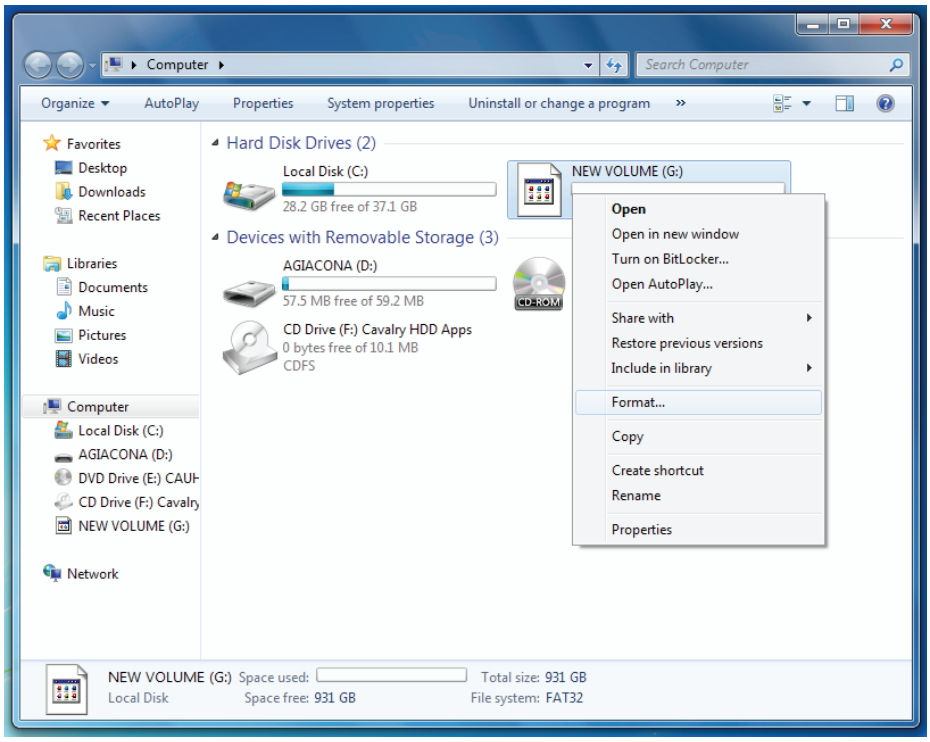


18) Create a good hint that only you will understand.

19) Write down your password in more than one location, and hide them somewhere safe! Once you have lost your password, there is no Data Recovery Specialist on the planet who can retrieve your data for you!

20) Navigate back to (My) Computer. Right-click on the new blank drive, and format it to NTFS. Be sure to check the "Quick Format" option.

21) Begin using your CAUH as you would any other external drive!



And, that's the end of the setup procedure! Stretch your legs and relax. Your data will be safe! Now you will be prompted to enter your password every time you connect your CAUH to a Windows computer. For enhanced security, always unplug your drive when you are not accessing it. Remember to store your most valuable data on more than one secure drive!

D SUPPORT

TROUBLE SHOOTING

- **The MFGTool encryption procedure keeps displaying the "Fail" message.** This can be caused by two things:
  - You are trying to browse-select files from the CD instead of the folder on your desktop. MFGTool cannot read the files from the CD because the CD cannot output them fast enough. This is why you must copy the CAUHCD folder to your desktop, and then browse-select the files from there.
  - You are not powering the CAUH on and off when the Operation Information window tells you to. As long as you do it quickly, as soon as prompted, the encryption procedure will "Pass."

- **I forgot my password. How do I retrieve it? Can you help me?**
  Once you have forgotten and lost your password, nothing can be done to retrieve your data! This is what makes AES encryption so safe. It also means you must be extra careful to write your password down in multiple safe places.

- **But doesn't Cavalry have a software "backdoor" which will allow you to retrieve my password?**
  No. The AES encryption protocol was intentionally designed without a software "backdoor". If there was a "backdoor", the NSA wouldn't be using it!

- **I've lost my password. I want to reformat the drive and start anew.**
  In order to reformat the CAUH, merely run the MFGTool software again. Start at step #7. Your computer may reboot abruptly. This is normal. After reboot, merely begin again from step #7, and continue until you have created a new password.

- **Is there a Mac version of the MFGTool software?**
  Unfortunately, no.

- **If I encrypt my CAUH on a Windows machine, can I use it on a Mac afterwards?**
  Unfortunately, no. The CAUH firmware only works with Windows.

- **Can I encrypt any disk using MFGTool?**
  Unfortunately, no. MFGTool is made especially for the controller chip used in the CAUH.

- **Why are there 2 new disks in (My) Computer?**
  "Cavalry HDD Apps" is the actual firmware of the CAUH. This resides on a special partition, and allows you to change your password when you double-click on it. It is also responsible for encrypting the disk. The second (blank) disk is where you will store all of your data; just as you would with any removable hard drive.

- **Can I reformat my CAUH once it has been encrypted?**
  Yes. Just login to Cavalry HDD Apps with your password, and reformat the other storage volume regularly within Disk Management.

- **How do I change my password?**
  Unplug and re-plug your CAUH. Now navigate to (My) Computer. Open Cavalry HDD Apps. Instead of entering your password, select "Options". Enter your old password followed by your new password and a clever hint.

- **How do I disable password-protection?**
  Unplug and re-plug your CAUH. Now navigate to (My) Computer. Open Cavalry HDD Apps. Instead of entering your password, select "Options". Enter your old password, and then check the box marked "Disable Password Security". To re-enable password security, simply re-plug the CAUH. Then, open Cavalry HDD Apps again. There, you can set a new password.

- **I disabled password security. I want to re-enable it, but now I can't open Cavalry HDD Apps!**
  Unplug and re-plug your CAUH. If you still cannot access Cavalry HDD Apps, you may have previously checked the box marked "Do not show this screen next time". As a result, you can no longer use the encryption login screen. The only way to encrypt your drive again is to backup all of your valuable data from the drive and run MFGTool once more. Start at step #7. This will erase your drive, and build a blank encrypted volume

- **How do I format or initialize my drive?**
  For a guide to formatting and initializing an unencrypted drive in both Windows and OS X, please go to our support site at: www.cavalrystorage.com

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